Remarks

The Examiner maintained the rejection claims 18-22 under Section 103(a) over Walt et al. in view of Wang in view of Farber. The element in independent claim 18 which is missing in Walt et al. and Wang, and the Examiner alleges is present in Farber is: "using a magnetic field to assemble the microparticles in a planar array on a designated section of a substrate wherein the spacing between particles within the array can be varied by varying the strength of the magnetic field…"

The Examner notes that Farber, in col. 3, lines 59-65 describes:

> A further feature of the invention is that the magnet and the plate are preferably configured to direct the flow of tagged particles to selected portions of the plate surface. For example, the magnet element can be arranged with the plate element so that the generated magnetic field is stronger at selected areas of the plate surface. ***The provision* of a *spatially varying magnetic field enables the device to control the distribution* of *the cells collected against the plate.*** In a preferred embodiment, the magnet element is positioned vertically above the plate, and couples to the plate at select locations for providing a stronger magnetic attraction at these locations. Alternatively, the magnet element can be fixed at one point on the periphery of a rotating disc that is disposed vertically above the plate. ***The rotating disk moves the magnet element relative to the plate to spatially vary the magnetic field. This configuration achieves* a *more uniform distribution* of *the particles collected against the surface.*** Other configurations for spatially varying the magnetic field can use a distributed array of magnet elements that can be selectively activated and deactivated.

The Examiner goes on to state:

> Farber, as discussed above, teaches that "the magnetic field is varied and spatially varying the magnetic field enables the device to control the spatial distribution of the cells/particles collected against the plate". Thus, Farber meets the requirement of the claimed invention by teaching applying a varied magnetic field to control the spatial distribution of the cells/particles collected against the plate.

The Examiner's interpretation of the first instance of highlighted language above in Farber is not correct. In the sentence: "The provision of a spatially varying magnetic field enables the device to control the distribution of the cells collected against the plate," the "distribution" is not "the spacing between the particles within the array" (as in claim 18) but rather is the location of the

array of cells on the plate. The second instance of highlighted language quoted above from Farber, and the reference to "uniform distribution" appears to be a reference to spacing between the particles. But this "uniform distribution" is achieved by "a rotating disc that is disposed vertically above the plate," and is not, therefore, fixed coils or magnets, as in the amended claim 18. Moreover, the Farber system is **not** capable of achieving: "wherein the spacing between the particles within the array can be varied by varying the strength of the magnetic field." It can only change the spacing between the particles by varying the physical location/ spatial distribution of the magnetic elements, i.e., using a rotating disc with magnets attached.

Moreover, there is no evidence that the Farber magnetic collection system can "assemble the microparticles in a planar array …" as in the claims. In fact, on exposure to a suspension of magnetic particles, such a collection device would form isolated patches/piles of the magnetic particles on the collection surface (located over the magnetic elements). Farber describes a method for optical inspection of the collected particles, but this further involves transferring the magnetic particles collected on the collection surface to an optical slide for the optical inspection (col. 9, ln 14-ln 20) via magnetic/mechanical transfer. This transfer step presumably spreads the captured cells (particles) in a thin even monolayer, as required for said optical inspection. This two step method for making optical interrogation ready monolayer of cells (particles) is entirely from what is claimed, where assembly of a "planar array" is required.

In conclusion, all rejections have been overcome, and notice of allowance is respectfully sought.